

## ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

### I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

<b>WDID</b>	<b>1B6008NMEN</b>
<b>Discharger</b>	<b>Willits Environmental Remediation Trust City of Willits</b>
<b>Name of Facility</b>	<b>Page Property, Willits</b>
<b>Facility Address</b>	<b>4280 Canyon Road</b>
	<b>Willits, CA 95490</b>
	<b>Mendocino County</b>
<b>Facility Contact, Title and Phone</b>	<b>Anne Farr, Trustee, Willits Environmental Remediation Trust (916) 781-9327 Dave Madrigal, City of Willits, (707) 459-4605</b>
<b>Authorized Person to Sign and Submit Reports</b>	<b>Anne Farr</b>
<b>Mailing Address</b>	<b>Willits Environmental Remediation Trust, 6016 Princeton Reach Way, Granite Bay, CA 95746 City of Willits, 111 East Commercial Street, Willits, CA 95490</b>
<b>Billing Address</b>	<b>SAME</b>
<b>Type of Facility</b>	<b>Former Burn Dump/Chromic Acid Disposal Pits</b>
<b>Major or Minor Facility</b>	<b>Minor</b>
<b>Threat to Water Quality</b>	<b>1A</b>
<b>Complexity</b>	<b>3</b>
<b>Pretreatment Program</b>	<b>No</b>
<b>Reclamation Requirements</b>	<b>User</b>
<b>Facility Permitted Flow</b>	<b>29,000 gpd</b>
<b>Facility Design Flow</b>	<b>29,000 gpd</b>
<b>Watershed</b>	<b>Outlet Creek</b>
<b>Receiving Water</b>	<b>Darby Creek</b>
<b>Receiving Water Type</b>	

- A. The City of Willits is the owner of the property where a former municipal burn dump operated from the 1940s to the early 1970s. Chromic acid wastes from the Remco Hydraulics Facility were disposed at the location of the burn dump. Initially, chromic acid was discharged to the operating burn dump, and subsequently in ponds dug at the site.

The Willits Environmental Remediation Trust (WERT) is an independent instrumentality of the United States District Court for the Northern District of California, as established

pursuant to the Amended Final Consent Decree, Final Order, and Final Judgment; And Order Establishing the Willits Environmental Remediation Trust, entered by Judge Susan Illston (N.D. Ca, Case No. C96-0283SI) on December 22, 2000 (the Consent Decree). The WERT was established in part to completely, timely and cost-effectively conduct all investigatory and remedial work at the Remco Facility located at 934 South Main Street in Willits, California (Remco Site), and surrounding areas in and around the City of Willits where hazardous substances associated with the Remco Facility operations have come to be located. The Page Property is one location where Remco wastes are located, and the WERT is investigating and cleaning up those wastes. The City of Willits and the WERT are referred to as the Dischargers.

- B. There is no current authorized discharge from this former burn dump. This is a new NPDES permit for the extraction and treatment of groundwater contaminated with hexavalent chromium, and the discharge of highly treated groundwater to Darby Creek.
- C. The Discharger filed a report of waste discharge and submitted an application for a New WDRs and National Pollutant Discharge Elimination System (NPDES) permit on January 31, 2006. Supplemental information was submitted on April 11, 2006 to address the disposal of highly treated groundwater following the seasonal prohibition period of May 15 to September 30 of each year.

## **II. FACILITY DESCRIPTION**

### **A. Description of Collection System, Wastewater and Biosolids Treatment or Controls**

The treatment system consists of an extraction trench, piping to the treatment system at the top of the hill, carbon vessels to remove contaminants, and a holding tank prior to the discharge to Darby Creek.

### **B. Discharge Points and Receiving Waters**

There will be one discharge point to Darby Creek to be located on the west end of the former burn dump site.

### **C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data**

There is an existing Monitoring and Reporting Program Order on the Page Property site that specifies the current groundwater monitoring and surface water monitoring program. In addition, Monitoring and Reporting Program No. R1-2006-0067 is included as Attachment E and specifies the required monitoring for the groundwater extraction and treatment system.

#### **D. Compliance Summary**

The discharge of groundwater contaminated with hexavalent chromium to Darby Creek is a violation of the discharge prohibitions contained in the Basin Plan. The groundwater extraction and treatment system is designed to prevent the discharge and come into compliance.

#### **E. Planned Changes**

This is a new proposal for a groundwater extraction and treatment system.

### **III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

#### **A. Legal Authorities**

This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

#### **B. California Environmental Quality Act (CEQA)**

Regional Water Board staff has prepared a Negative Declaration and Environmental Checklist for the issuance of this new NPDES permit, and to comply with the provision of the California Environmental Quality Act. These documents will be considered for adoption by the Regional Water Board at its public meeting to be held on August 9, 2006. These documents are being circulated for agency and public review.

#### **C. State and Federal Regulations, Policies, and Plans**

1. The Basin Plan at page 2-1.00 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for Darby Creek, but does identify present and potential uses for Outlet Creek, to which Darby Creek is tributary. These beneficial uses are listed below. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63, Sources of Drinking Water Policy, requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the

Basin Plan. Thus, as discussed in detail in this Fact Sheet, beneficial uses applicable to Darby Creek are as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Darby Creek	<u>Existing:</u> MUN – Municipal and Domestic Supply AGR – Agricultural Supply IND – Industrial Service Supply GWR – Groundwater Recharge FRSH – Freshwater Replenishment NAV – Navigation REC1 – Water Contact Recreation REC2 – Non-Contact Water Recreation COMM – Commercial and Sport Fishing COLD – Cold Freshwater Habitat WILD – Wildlife Habitat RARE – Preservation of Rare, Threatened, or Endangered Species MIGR – Migration of Aquatic Organisms SPWN – Spawning, Reproduction, and/or Early Development <u>Potential:</u> PRO – Industrial Process Supply POW – Hydropower Generation AQUA – Aquaculture
002	Groundwater	<u>Existing</u> MUN --Municipal and domestic water supply AGR -- Agricultural supply IND -- Industrial service supply FRSH -- Freshwater replenishment to Surface Waters CUL – Native American Culture <u>Potential</u> PRO -- Industrial process supply AQUA -- Aquaculture

2. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
3. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995 and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.

4. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Boards in their basin plans. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP includes procedures for determining the need for and calculating water quality-based effluent limitations (WQBELs), and requires Dischargers to submit data sufficient to do so.
5. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution 68-16 requires that the existing water quality be maintained unless any change is consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use, and will not result in water quality less than that prescribed in adopted policies. In addition, discharger must utilize the best practicable treatment or control to prevent a nuisance and assure the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Groundwater extraction and treatment is an available strategy for cleaning up contaminated groundwater that has the advantage of controlling contaminant migration while completing the cleanup. The Regional Water Board finds that compliance with this Permit results in the maximum benefit to the people of the State and is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16.
6. **Anti-Backsliding Requirements.** CWA Sections 402 (o) (2) and 303 (d) (4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. If the quality of waters equals or exceeds levels necessary to protect designated beneficial uses and water quality standards, an effluent limitation may be revised if consistent with the antidegradation policy. (33 USC § 1313(d)(4)(B).) Discharges of any constituent for which the receiving water is listed as impaired is prohibited in this Permit. Order No. R1-2006-0048 satisfies all anti-backsliding requirements of the Clean Water Act and implementing regulations.
7. **Monitoring and Reporting Requirements.** Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the regional water boards to

require technical and monitoring reports. The Monitoring and Reporting Program (MRP), provided in Attachment E, establishes monitoring and reporting requirements to implement federal and State requirements.

#### **D. Impaired Water Bodies on CWA 303(d) List**

1. On June 5 and July 25, 2003, the USEPA approved the list of impaired water bodies, prepared by the State Water Board pursuant to Section 303 (d) of the CWA – waterbodies which are not expected to meet applicable water quality standards after implementation of technology-based effluent limitations for point sources.
2. The Eel River is listed as an impaired water body for sediment and temperature pursuant to Section 303(d) of the CWA. The South Fork Eel River Total Maximum Daily Load was promulgated by U.S. EPA on December 16, 1999. An analysis of the discharge determined that it does not contain temperature or sediment at levels which will cause, have the reasonable potential to cause, or contribute to increases in temperature or sediment levels in the Eel River. This finding is based in part that the treatment system will remove any sediment or suspended materials, and the summer seasonal discharge prohibition.

#### **E. Other Plans, Policies and Regulations**

The “Water Quality Control Plan for the North Coast Region” (Basin Plan) includes water quality objectives, implementation plans for point source and nonpoint source discharges, prohibitions, and statewide plans and policies. The Basin Plan contains a narrative objective (standard) for toxicity that requires:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassay of appropriate duration or other appropriate methods as specified by the Regional Water Board.

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when necessary for other control water that is consistent with the requirements for "experimental water" as described in Standard Methods for the Examination of Water and Wastewater 18th Edition (1992), or current edition. At a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute bioassays of effluent will be prescribed. Where appropriate, additional numerical receiving water objectives for specific toxicants

will be established as sufficient data become available, and source control of toxic substances will be encouraged.

This Discharger has determined that this facility does not have storm water discharges to surface waters because the facility consists of a building to house the treatment unit. This facility is not required to file a stormwater permit.

#### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations; and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR §122.44(d) requires that permits include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

##### **A. Discharge Prohibitions**

1. Discharge Prohibition III.1. The discharge of waste, including highly treated groundwater and purge waters extracted from the site and treated, is prohibited unless the discharge is regulated by an NPDES permit or is discharged to a permitted facility.

The prohibition is consistent with previous NPDES permits regulating groundwater treatment systems. Technology exists to remove contaminants to below the detection limit. Prohibiting detectable levels of contaminants to surface waters ensures protection of the beneficial uses of waters of the State.

2. Discharge Prohibition III.2. The discharge of groundwater containing constituents in excess of background levels in the receiving water is prohibited.

This prohibition is consistent with previous NPDES Permits regulating groundwater treatment systems. The purpose of this prohibition is to prevent water quality impairment and degradation of surface waters from a groundwater discharge. For example, naturally occurring metals in groundwater such as iron and manganese can cause impairment to fisheries. Prohibiting the discharge above background concentrations in the receiving water will ensure protection of all beneficial uses of waters of the State.

3. Discharge Prohibition III.3. The discharge from the treatment facility of detectable levels of the constituents listed in the table attached to this Order is prohibited.

This prohibition is designed to provide minimum levels of detection for the constituents listed in Tables 1, 2, and 3 included in Attachment E. In many instances, minimum levels of detection can vary from laboratories. The tables provide the required minimum detection levels for the analytes listed in each table.

4. Discharge Prohibition III.4. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code (CWC) is prohibited.

This prohibition is based on CWC Section 13050.

Discharge Prohibition III.5. The discharge of extracted and treated groundwater/purge waters in excess of 29,000 gpd is prohibited.

The prohibition is based on the groundwater treatment system designed to treat 29,000 gpd. Any increased flow to the treatment system may result in inadequate treatment. Therefore, the prohibition is in place to prohibit flows in excess of the design capacity.

5. Discharge Prohibition III.6. Bypass or overflow of untreated groundwater to waters of the State from the treatment system or from the collection and transport systems or from pump stations tributary to the treatment system is prohibited. This prohibition is based on the Basin Plan to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of CWC sections 13260 through 13264 relating to the discharge of waste to waters of the State without filing for and being issued a permit. This prohibition applies to, but is not limited to, sanitary sewer overflows, spills, and other unauthorized discharges of wastewater within the collection, treatment, reclamation, and disposal facilities.

Discharge Prohibition III.7. The discharge of waste to land that is not owned by or under agreement to use by the permittee is prohibited.

This is a standard prohibition contained in previous NPDES Permits for groundwater treatment systems. The prohibition is included in this Permit to ensure the discharge of highly treated water is not discharged to land without the authorization of the property owner and in accordance with this Permit.

6. Discharge Prohibition III. 8. The discharge of treated groundwater and purgewaters from the treatment system to the Eel River or its tributaries is prohibited during the period May 15 through September 30 of each year.

The Basin Plan prohibits discharges to the Eel River and its tributaries during the period May 15 through September 30 (Chapter 4, North Coastal Basin Discharge Prohibition No. 4). The original intent of this prohibition was to prevent the contribution of wastewater to the baseline flow of the Eel River during the period of



the year when the Eel River and its tributaries experience the heaviest water-contact recreation use.

## **B. Technology-Based Effluent Limitations**

### **1. Scope and Authority**

The CWA requires that technology-based effluent limits be established based on several levels of controls:

- a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCP standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of the NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires the US EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS for specific industrial categories. Where the US EPA has not yet developed ELGs for a particular industry or a particular pollutant, Section 402(a)(1) of the CWA and US EPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

### **2. Technology-Based Effluent Limitations**

The pollutants of concern and the MLs established for these pollutants are listed in Tables 1, 2, and 3 of Attachment E. Organic pollutants must be treated to the MLs established in the tables. Inorganic pollutants, if naturally found in groundwater, can

be discharged at the background concentrations in the Darby Creek. The Regional Water Board has therefore established an effluent limitation for organic pollutants requiring their removal to nondetectable concentrations using BPJ based on the observation that treatment technology, properly operated, is available to effectively reduce pollutants of concern to the nondetectable concentrations, which are defined by the Order.

## **C. Water Quality-Based Effluent Limitations (WQBELs)**

### **1. Scope and Authority**

As specified in 40 CFR §122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard.

### **2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

- a. Beneficial Uses. Applicable beneficial uses are discussed in II.B of this Fact Sheet.
- b. Basin Plan Water Quality Objectives. In addition to the specific water quality objectives indicated above, the Basin Plan contains narrative water quality objectives for color, tastes and odors, floating material, suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, bacteria, temperature, toxicity, pesticides, chemical constituents, and radioactivity that apply to inland surface waters, enclosed bays, and estuaries, including Darby Creek. These narrative water quality objectives are reflected in Section V., Receiving Water Limitations, of the Order.

### **3. WQBELS**

Effluent limitations established by the Order are based on the understanding that hexavalent chromium and other forms of chromium attributable with the discharge of chromic acid to the former burn dump can be treated to nondetectable concentrations using available treatment technologies. Organic pollutants that may be detected in groundwater can also be treated to nondetectable concentrations. However, inorganic pollutants that may be present naturally in groundwater may be discharged to Darby Creek only at or below, background concentrations in the receiving water. The Monitoring and Reporting Program requires sampling for inorganic pollutants in Darby Creek to establish background concentrations.

Order No. R1-2006-0067 establishes a whole effluent, acute toxicity effluent limitation as well as monitoring requirements for acute and chronic toxicity. These

requirements pertaining to whole effluent toxicity are based on the Clean Water Act and the Basin Plan. The Basin Plan includes a water quality objective for the North Coast Region that requires all waters to be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. To assure compliance with the Basin Plan's narrative toxicity objective, this Order establishes an acute toxicity effluent limitation and requires the Discharger to conduct whole effluent toxicity testing for acute and chronic toxicity, as specified in the Monitoring and Reporting Program (Attachment E, Section V.).

The Order implements federal guidelines (U.S. EPA Regions 9 & 10 Guidelines for Implementing Whole Effluent Toxicity Testing Programs) by requiring dischargers to conduct acute toxicity tests on a fish and an invertebrate species to determine the most sensitive species. According to the U.S. EPA manual, *Methods for Estimating the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821-R-02-012), the acceptable vertebrate species for the acute toxicity test are the fathead minnow, *Pimephales promelas* and the rainbow trout, *Oncorhynchus mykiss*. The acceptable invertebrate species for the acute toxicity test are the water flea, *Ceriodaphnia dubia*, *Daphnia magna*, and *D. pulex*.

*The Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* requires the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objective for aquatic life in the Basin Plan. Although a chronic toxicity effluent limitation is not established by the Permit, infrequent monitoring for chronic toxicity is required to assess compliance with the Basin Plan's narrative water quality objective for toxicity. The Permit includes monitoring trigger for chronic toxicity of 1.0 TUc and requires accelerated monitoring if this trigger is exceeded.

In addition to WET monitoring, Special Provisions VI. C. 2. b requires the Permittee to submit to the Regional Water Board a TRE Work Plan for approval by the Executive Officer, to ensure the Permittee has a plan to immediately move forward with a TRE, if persistent effluent toxicity is encountered.

#### **D. Final Effluent Limitations**

Final effluent limitations are established by Section IV of the Permit.

#### **E. Interim Effluent Limitations**

This Permit does not include interim effluent limitations.

## **F. Land Discharge Specifications**

This Permit allows the discharge of highly treated groundwater to land under the control of the WERT and City of Willits during the seasonal discharge prohibition of May 15 to September 30 of each year. The effluent limits for the land discharge are the same for a discharge to land and to Darby Creek.

## **G. Reclamation Specifications**

This Permit allows the discharge of highly treated groundwater to land. The reclamation requirements for wastewater from sewage treatment facilities do not apply to this Permit.

## **V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

### **A. Surface Water**

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the North Coast Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Permit have been updated to reflect Basin Plan objectives for inland surface waters, enclosed bays, and estuaries contained in Chapter 3 of the Basin Plan.

### **B. Groundwater**

Groundwater limitations included in the proposed draft Permit were derived from Water Quality Objectives for Groundwaters contained in Chapter 3 of the Basin Plan.

## **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the California Water Code authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for this facility.

### **A. Influent Monitoring**

Influent monitoring for the groundwater treatment system include the following constituents:

Parameter	Units	Sample Type	Sampling Frequency	Analytical Method
Flow	gpd	Continuous meter	daily	Standard Methods
Temperature	° C	Field monitor	1x / month	
pH	stnd units	Field monitor	1x / month	
Hexavalent Chromium	µg/L	Grab	1x / month	EPA Method 7199
TPH	µg/L	Grab	2x / year	EPA Method 8015
VOCs	µg/L	Grab	1x / month	EPA Method 8260

## B. Effluent Monitoring

The Discharger shall monitor treated effluent at Monitoring Locations M-001, etc in accordance with the following schedule.

Parameter	Units	Sample Type	Sampling Frequency	Analytical Method
Flow	gpd	Continuous meter	daily	Standard Methods
Temperature	° C	Field monitor	1x / month	
pH	stnd units	Field monitor	1x / month	
Total Dissolved Solids	mg/L	Grab or Composite	2x / year	
Specific Conductance	µmhos/cm	Field monitor	2x / year	
Dissolved Oxygen	mg/L	Field monitor	2x / year	
Hardness	mg/L	Grab or Composite	2x / year	
Hexavalent Chromium	µg/L	Grab	1x / month	EPA Method 7199
TPH <sup>a</sup>	µg/L	Grab	2x / year <sup>e</sup>	EPA Method 8015
VOCs	µg/L	Grab	1x / month <sup>e</sup>	EPA Method 8260
Acute Toxicity <sup>a</sup>	pass/fail	Grab or Composite	1x / year <sup>e</sup>	
Chronic Toxicity <sup>b</sup>	TUc	Grab or Composite	1x / 5 years <sup>e</sup>	
CTR Pollutants <sup>c</sup>	µg/L	Grab	1x / 5 years <sup>e</sup>	
Title 22 Pollutants <sup>d</sup>	µg/L	Grab	1x / 5 years <sup>e</sup>	

<sup>a</sup> Whole effluent acute toxicity testing shall be conducted in accordance with Section V of this MRP.

<sup>b</sup> Whole effluent chronic toxicity testing shall be conducted in accordance with Section V of this MRP.

<sup>c</sup> CTR Pollutants are those identified as Compound Nos. 1 – 126 by the California Toxics Rule (CTR) at 40 CFR 131.38.

<sup>d</sup> Title 22 Pollutants are those pollutants with drinking water primary maximum contaminant levels (MCLs) established by the State Department of Health Services at Title 22 of the California Code of Regulations, Division 4, Chapter 15, Article 4 (Primary Standards – Inorganic Chemicals) and Article 5.5 (Primary Standards – Organic Chemicals).

<sup>e</sup> Monitoring for this parameter shall occur during the first sixty days of operation and thereafter in accordance with the schedules established by Section IV of this MRP.

Acute toxicity monitoring of effluent is required annually to determine compliance with the whole effluent acute toxicity limitation established in this Permit.

Chronic toxicity monitoring of effluent is required one time every five years to determine compliance with the narrative water quality objective for toxicity expressed by the Basin Plan.

Monitoring of constituents contained in Tables 1, 2, and 3 of attachment E(CTR and Title 22 pollutants) in the effluent and in the receiving water is required once every five years to assess compliance with effluent limitations and receiving water prohibitions.

### **C. Whole Effluent Toxicity Testing Requirements**

#### **1. Acute Toxicity**

To determine compliance with the acute toxicity limitation, the Permit establishes an annual monitoring requirement for acute toxicity. Because ground water quality typically changes very slowly over time, the Regional Water Board has determined that wastewater influent and effluent quality from authorized sites will be relatively stable, and annual monitoring will provide a sufficient determination of compliance.

#### **2. Chronic Toxicity**

To determine compliance with the Basin Plan's narrative water quality objective for toxicity, the Permit establishes a monitoring requirement for chronic toxicity of one time every five years, which satisfies the requirement of *The Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* to use short-term chronic toxicity tests to determine compliance with the Basin Plan's water quality objective for toxicity. Because discharges from authorized sites are temporary, until remediation is completed, the Regional Board has determined that acute (instead of chronic) toxicity monitoring will be more meaningful in assessing compliance with the Basin Plan's narrative objective for toxicity. Although the monitoring frequency for chronic toxicity is infrequent, chronic toxicity monitoring is required within the first three days of operation of a newly authorized pump-and-treat operation. If chronic toxicity is present in effluent from a newly authorized facility, the conditions will be discovered immediately after operation is initiated and corrective steps will be taken.

A numeric chronic toxicity monitoring trigger of 1 TUc is established by the Permit. The presence of chronic toxicity above this trigger requires accelerated monitoring and a Toxicity Reduction Evaluation if toxicity persists. Guidance regarding accelerated monitoring and TRE initiation is provided in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD), EPA/505/2-90-001, March 1991. The TSD (page 118) recommends a TRE if toxicity is present repeatedly or at

levels above effluent limits more than 20 percent of the time. The Permit, therefore, requires four accelerated chronic monitoring tests. If no toxicity is demonstrated in the four accelerated tests, then it demonstrates that toxicity is not present at levels above the monitoring trigger more than 20 percent of the time (only 1 of 5 tests are toxic, including the initial test). If there is adequate evidence of a pattern of effluent toxicity, i.e., chronic toxicity is present above the monitoring trigger more than 20 percent of the time, the Executive Officer may require the Permittee to initiate a TRE.

#### **D. Receiving Water Monitoring**

The draft Monitoring and Reporting Program includes monitoring of Darby Creek for toxic pollutants and acute and chronic toxicity in order to monitor effluent impacts on receiving water quality.

Compliance with receiving water limitations will be demonstrated by monthly grab samples taken upstream and downstream of the Discharge Point at points R-001 and R-002 when discharging to Darby Creek.

### **VII. RATIONALE FOR PROVISIONS**

#### **A. Standard Provisions**

Standard Provisions, which in accordance with 40 CFR §§122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D to the Order.

#### **B. Regional Board Standard Provisions**

Regional Water Board Standard Provisions are based on the Clean Water Act, U.S. EPA regulations, and the California Water Code.

#### **C. Special Provisions**

##### **1. Reopener Provisions**

Provision VI.A.2 contains a reopener provision. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include demonstration that the Discharger is causing or significantly contributing to adverse impacts to water quality and/or beneficial uses of receiving waters; new interpretation of water quality objectives of the Basin Plan; or if effluent monitoring or other new information demonstrates reasonable potential for any pollutant or pollutant parameter with applicable water criteria established by the NTR, CTR, or Basin Plan.

## 2. Special Studies and Additional Monitoring Requirements

### a. Whole Effluent Toxicity

In addition to a limitation and monitoring for whole effluent acute toxicity, the Permit requires infrequent monitoring for whole effluent chronic toxicity to determine compliance with the Basin Plan's narrative water quality objective for toxicity. If either the acute toxicity effluent limitation or a chronic toxicity monitoring trigger of 1 TUc is exceeded, the Discharger must conduct accelerated toxicity monitoring. Results of accelerated toxicity monitoring will indicate a need to conduct a Toxicity Reduction Evaluation (TRE), if toxicity persists; or it will indicate that a return to routine toxicity monitoring is justified because persistent toxicity has not been identified by accelerated monitoring.

TREs shall be conducted in accordance with the TRE Workplan prepared by the Discharger pursuant to Section VI. C. 2. b of the Order. As a result of a TRE, this Order may be reopened to include a chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE.

### b. Toxicity Reduction Evaluation Workplan

Existing and new dischargers must prepare, maintain, and update, as necessary, a TRE Workplan, which must be implemented when acute or chronic toxicity is persistent in effluent as determined by accelerated toxicity monitoring. Following initiation of a TRE, if the cause of toxicity cannot be identified and eliminated within a reasonable period of time, as determined by the Executive Officer, the Discharger shall discontinue the discharge to receiving waters and submit an evaluation to the Regional Water Board on alternate disposal methods or treatment system modifications that are proposed to correct the effluent toxicity. The Discharger shall correct the toxicity to the satisfaction of the Executive Officer prior to resuming a discharge to surface waters.

Numerous guidance documents are available, as identified below, for preparation of the TRE Workplan.

- i. *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, (EPA/833B-99/002), August 1999.*
- ii. *Generalized Methodology for Conducting Industrial TREs, (EPA/600/2-88/070), April 1989.*
- iii. *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition, EPA 600/6-91/005F, February 1991.*



- iv. *Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I*, EPA 600/6-91/005F, May 1992.
  - v. *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting acute and Chronic Toxicity*, Second Edition, EPA 600/R-92/080, September 1993.
  - vi. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity*, Second Edition, EPA 600/R-92/081, September 1993.
  - vii. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012, October 2002.
  - viii. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA-821-R-02-013, October 2002.
  - ix. *Technical Support Document for Water Quality-based Toxics Control*, EPA/505/2-90-001, March 1991
- c. Operation and Maintenance Manual
- The requirement for all dischargers to prepare, maintain, and update, as necessary, an O&M Manual is retained from Order No. R1-2001-9.
- d. Engineering Design Report
- The requirement for all dischargers to submit an Engineering Design Report with its NOI/Application is retained from Order No. R1-2001-9.
- e. Granular Activated Carbon Quality Control/Quality Assurance
- The discharger must implement a Quality Control/Quality Assurance (QA/QC) Program to assure that newly replenished granular activated carbon in the treatment system is providing high quality effluent with respect to pH, ammonia, and inorganic constituents. Activities conducted as part of the GAC QA/QC program shall be documented in routine Discharge Monitoring Reports submitted for the facility.

## **VIII. PUBLIC PARTICIPATION**

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve

as a National Pollutant Discharge Elimination System (NPDES) permit for the Page Property. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

#### **A. Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following: A Notice was published in the *Willits News*, mailed to the Remco Interested Parties List, and provided to all contiguous land owners.

#### **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on July 24, 2006.

#### **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **August 9, 2006**  
Time: **9:00 a.m., or as announced in the Agenda**  
Location: **Regional Water Board Office**  
**5550 Skylane Blvd., Suite A**  
**Santa Rosa, CA 95403**

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is **<http://www.waterboards.ca.gov/northcoast/>** where you can access the current agenda for changes in dates and locations.

#### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

#### **E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling **(707) 576-2220**.

#### **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

#### **G. Additional Information**

Requests for additional information or questions regarding this order should be directed to **Janice Goebel** at **(707) 576-2676**.